

Utah Division of Drinking Water Policy for After-the-Fact Plan Review

I. Background

Utah Administrative Code R309-500 through 550 addresses review and approval of proposed designs of drinking water sources/facilities before construction. Utah Division of Drinking Water (DDW) sometimes encounters drinking water facilities/sources that are in use by public water systems (PWS) but were constructed or modified without prior Plan Approval (PA) or an Operating Permit (OP).

Below are some examples of typical situations where after-the-fact reviews become necessary:

1. As part of overall review of a new PWS (including pre-existing infrastructure)
A camp (or subdivision) was constructed decades ago as a non-public water system. It recently exceeded the threshold for population (or number of service connections) and is now a regulated PWS. This PWS is required to go through the plan review process for:
 - All existing drinking water infrastructure prior to PWS classification, and
 - New construction or modifications to the system since the PWS classification.
2. Modifying a facility to correct physical deficiencies
Physical deficiencies were identified during a sanitary survey of a PWS. Sometime after the sanitary survey, PWS made modifications to its facilities to correct the identified deficiencies and improved the infrastructure. PWS did not obtain PA or OP from DDW for the modifications. The modified facilities have been in use for a long time.
3. Constructing or installing a new facility without submitting plans or specifications
A PWS recently installed a booster chlorinator in its distribution system to deal with piping biofilm and positive total coliform (not *E. coli*) problems. The PWS did not go through the plan review process for installing the booster chlorinator.
4. Construction without obtaining final DDW Plan Approval
Plans and specifications were submitted for a proposed facility but were not sufficiently complete. The PWS never received PA or an OP for the constructed facility.

In these cases, DDW conducts after-the-fact reviews to evaluate the facilities/sources for compliance with Utah Administrative Code R309-500 through 550, assess potential public health risk, and impose necessary requirements such as sampling, monitoring, reporting, physical deficiency correction, etc.

II. Policy for After-the-Fact Review of Sources and Facilities Constructed without Plan Approval (PA) or Placed in Service without Operating Permit (OP)

The policy below is to ensure consistency in conducting the after-the-fact plan reviews and proper coordination within DDW.

- 1. Immediately assess deficiency points in IPS database for using unapproved facilities/sources.**
 - a. **Facility:** 50 to 200 deficiency points for construction without proper plan approval [R309-400-11(1)(b)]
 - b. **Source:** 200 deficiency points for using an unapproved source [R309-400-6(1)(a)]
 - c. Work with the IPS Rule Manager to add the deficiency or deficiencies to the IPS database.
 - d. IPS points may be removed only after issuance of OP for the facility under review.
- 2. Impose current monitoring and reporting requirements and notify PWS immediately when applicable**
 - a. Update the facility information in SDWIS for the constructed facility.
 - b. Work with Rules Section to update the monitoring/reporting requirement in SDWIS for the constructed facility if applicable.
 - c. Work with Rules Section to add applicable sampling points in SDWIS.
 - d. Coordinate with Rules Section so Rules Section will notify the PWS of the new monitoring and reporting requirements if applicable.
- 3. Gather PWS operational records, water quality data, and source protection information as applicable.**
 - a. Determine whether historical data indicate concerns.
 - b. Has DDW received New Source Chemistry data for an unapproved source?
 - c. Are historical and recent bacteriological sample results for the source (prior to any treatment) available?
 - d. Are historical and recent bacteriological sample results for the distribution system available?
 - e. Are chemical sample results (e.g., arsenic, lead, copper, etc.) available (if applicable)?
 - f. Are there drinking water source protection concerns? (Examples: Is the source considered “existing” per R309-600-6(1)(k)? Are there uncontrolled potential contamination sources? Can land use agreements be obtained or is there an equivalent local ordinance in place? Can conditional approval be considered with additional requirements or monitoring?)

4. **If the source/facility subject to after-the-fact review includes more than water lines,** Plan Review Engineer **must conduct at least one onsite inspection** of the sources/facilities in question (or a sanitary survey by Permitting Section staff or DEQ District Engineers) to:
 - a. Identify physical deficiencies during the inspection, and
 - b. Determine whether construction meets the current rule requirements or the intent of the requirements.
5. **Determine whether there are any public health risks and safety concerns.**
 - a. Consider possible consequences related to both action and inaction by DDW.
6. **Evaluate what can be done at this point to achieve better protection.**
 - a. Consider whether the facility can be approved conditionally to allow its operation to continue by imposing additional monitoring/reporting to monitor water quality changes. (Example: at least 12 months of monthly source bacteriological sampling at a spring or well, quarterly nitrate sampling for at least 3 years for trending, etc.)
7. Coordinate with management in determining whether DDW has received sufficient information for issuing after-the-fact PA and/or OP. (Example: well grout seal certificate for well, PE stamped plans/specs, PE certification of rule conformance, water quality date, source protection compliance, etc.)
 - a. **If plans and specs designed by a Professional Engineer (PE), i.e., stamped, signed and dated by a PE, are available,** DDW may issue after-the-fact PA and OP.
 - b. **If plans and specs designed by a PE are not available** and if it's determined that DDW does not have sufficient information to issue an after-the-fact PA, consider whether there is basis for issuing an after-the-fact OP.
 - i. The after-the-fact OP may include specific conditions, for example, imposing additional water quality monitoring and reporting requirements or source flow or aquifer drawdown monitoring requirements.
 - ii. In some cases, consider after-the-fact **temporary** OP to gather additional data before issuing the after-the-fact permanent OP.
 - iii. The after-the-fact OP (or temporary OP) must include an explanation of the reasons and justifications for not issuing PA.
 - iv. DDW may assign an A226 code in the IPS database if the facility/source construction significantly deviates from current rule requirements and for which DDW does not have sufficient information to issue after-the-fact PA. The A226 code discloses that the PWS did not follow typical plan approval process for the identified facility/source and that after-the-fact

OP is issued without PA. The A226 code carries zero deficiency points but remains in the IPS database until the identified facility/source is replaced or brought up to date. Plan Review Engineer will coordinate with the IPS rule manager to update/remove the A226 code in the IPS database accordingly.

- c. Include exception to rule in the after-the-fact PA and/or OP to address deviations from the current design and construction standards when applicable.
 - i. Identify the facility, basis of granting the exception, whether addition conditions are imposed, whether the intent of the rule is met, etc.
 - ii. Enter the exception in the WaterLink exception tracking module.
8. A fee of \$1,000 per project may be assessed for projects constructed without approval in accordance with Department of Environmental Quality (DEQ) fee schedule. **See the DDW plan review fee implementation policy for detailed information.**
9. For the facilities/sources that are in use and DDW cannot issue after-the-fact PA or OP for, DDW may take further enforcement action. (Example: issuing a cease and desist order for the operation of the facility or source, issuing a Notice of Violation, etc.)

III. References

- R309-100-5 Approval of Plans and Specifications for Public Water Supply Projects
- R309-105-6(1) Approval of Engineering Plans and Specifications, (2) Acceptable Design and Construction Methods, and (6) Requirements After Approval of Plans for Construction
- R309-500-4(1) Construction of New Facilities and Modification of Existing Facilities
- R309-500-6(1) Project Notification and (2) Pre-Construction Requirements
- R309-500-9 Operating Permit